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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/470,299 12/22/99 YEO

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EXAMINER

TM02/0809

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ART UNIT

PAPER NUMBER

2613  
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08/09/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/470,299

Applicant(s)

YEO ET AL.

Examiner

Andy S. Rao

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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## DETAILED ACTION

### *Specification*

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Andrew et al., (hereinafter referred to as “Andrew”).

Andrew discloses a method for decoding compressed video (Andrew: column 5, lines 10-15), comprising: reading a stream of compressed video into a memory (Andrew: column 6, lines 54-66), said video having multiple pictures, each picture having one or more independent elements (Andrew: column (Andrew: column 8, lines 1-20); assigning, via a first processor of a group of processors sharing said memory (Andrew: column 6, lines 40-55), at least one independent element per processor to be decoded by the processors in parallel (Andrew: column 7, lines 37-52); and decoding the independent elements of the video in parallel (Andrew: column 7, lines 30-36), as in claim 1.

Regarding claim 2, Andrew discloses that the independent elements are slices (Andrew: column 7, lines 56-57), as in the claim.

Regarding claims 3-5, Andrew discloses that assigning the independent elements a varying number of slices to individual processors (Andrew: column 7, lines 58-62), as in the claims.

Regarding claim 6, Andrew discloses that the slice includes at least one macroblock (Andrew: column 12, lines 55-60), as in the claim.

Regarding claim 7, Andrew discloses decoding in accordance with MPEG (Andrew: column 5, lines 20-25), as in the claim.

Regarding claim 8, Andrew discloses "real-time" decoding (Andrew: column 6, lines 33-37), as in the claim.

Andrew discloses a computer readable medium (Andrew: column 25-35) having stored thereon a set of instructions (Andrew: column 6, lines 32-35), said set of instructions for decoding compressed video (Andrew: column 5, lines 10-15), which when executed by a processor (Andrew: column 6, lines 65-68), cause said processor to perform a method comprising the steps of, comprising: reading a stream of compressed video into a memory (Andrew: column 6, lines 54-66), said video having multiple pictures, each picture having one or more independent elements (Andrew: column (Andrew: column 8, lines 1-20); assigning, via a first processor of a group of processors sharing said memory (Andrew: column 6, lines 40-55), at least one independent element per processor to be decoded by the processors in parallel (Andrew: column 7, lines 37-52); and decoding the independent elements of the video in parallel (Andrew: column 7, lines 30-36), as in claim 9.

Regarding claim 10, Andrew discloses that the independent elements are slices (Andrew: column 7, lines 56-57), as in the claim.

Regarding claims 11-13, Andrew discloses that assigning the independent elements a varying number of slices to individual processors (Andrew: column 7, lines 58-62), as in the claims.

Regarding claim 14, Andrew discloses that the slice includes at least one macroblock (Andrew: column 12, lines 55-60), as in the claim.

Regarding claim 15, Andrew discloses decoding in accordance with MPEG (Andrew: column 5, lines 20-25), as in the claim.

Regarding claim 16, Andrew discloses "real-time" decoding (Andrew: column 6, lines 33-37), as in the claim.

Andrew discloses a computer system, comprising: a plurality of processors (Andrew: column 6, lines 42-45); a memory coupled to said plurality of said processors (Andrew: column 6, lines 55-60); a first unit of logic to read a stream of compressed video into a memory (Andrew: column 6, lines 54-66), said video having multiple pictures, each picture having one or more independent elements (Andrew: column (Andrew: column 8, lines 1-20); and said first unit of logic further assigns, via a first processor of a group of processors sharing said memory (Andrew: column 6, lines 40-55), at least one independent element per processor to be decoded by the processors in parallel (Andrew: column 7, lines 37-52); and decoding the independent elements of the video in parallel (Andrew: column 7, lines 30-36), as in claim 17.

Regarding claim 18, Andrew discloses that the independent elements are slices (Andrew: column 7, lines 56-57), as in the claim.

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Regarding claims 19-21, Andrew discloses that assigning the independent elements a varying number of slices to individual processors (Andrew: column 7, lines 58-62), as in the claims.

Regarding claim 22, Andrew discloses that the slice includes at least one macroblock (Andrew: column 12, lines 55-60), as in the claim.

Regarding claim 23, Andrew discloses decoding in accordance with MPEG (Andrew: column 5, lines 20-25), as in the claim.

Regarding claim 24, Andrew discloses "real-time" decoding (Andrew: column 6, lines 33-37), as in the claim.

### *Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bhashkaran discloses a method and apparatus for fast digital signal decoding. Crump discloses a video processor with addressing mode control.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (703)-305-4813. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S. Kelley can be reached on (703)-305-4856. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-308-5359 for regular communications and (703)-308-5359 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-4700.

Andy S. Rao  
Primary Examiner  
Art Unit 2613

ANDY RAO  
PRIMARY EXAMINER



asr  
August 7, 2001